Chapter 2 Installing or Restoring the Operating System

This chapter discusses installation and restoration of the operating system. This chapter includes the following sections:

- "Installing the Operating System and Software" on page 28

- "Restoring the Operating System" on page 31

- "Protecting the Software" on page 31

- "Ordering Backup Software" on page 32

If the workstation was shipped with a preinstalled OS, it is configured automatically the first time the workstation is turned on.

⚠ **CAUTION** Do not add optional hardware devices to your workstation until the operating system is successfully installed. Doing so can cause errors and might prevent the operating system from installing properly.

⚠ **CAUTION** When the automatic installation has begun, DO NOT TURN OFF THE WORKSTATION UNTIL THE PROCESS IS COMPLETE. Turning off the workstation during the installation process might damage the software that runs the workstation.

Installing the Operating System and Software

The following section discusses the operating system and HP software installation procedures.

Microsoft Windows XP Professional

The first time you turn on your workstation, you will be prompted to select a language for the operating system. After selecting the language, read and follow the on-screen instructions to complete the installation of the operating system. This takes approximately 10 minutes, depending on the system hardware configuration. During the process, do not turn off your workstation unless you are directed to do so.

Installing or Upgrading Device Drivers

To install hardware devices, such as a printer, a display adapter, or network adapter after the operating system installation is completed, make sure that the operating system has access to the appropriate software drivers for the devices. Device drivers are usually provided on a CD supplied with the peripheral device.

Some existing peripheral devices might not have been shipped with drivers developed for Windows XP. To locate the most current device drivers, visit http://www.hp.com.

Creating a Restore Diskette

To create a restore diskette for Windows XP, go to **Start>All Programs>Accessories>System Tools>System Restore**, and follow the on-screen instructions.

Linux-Preinstalled Workstations

If you have a Linux-preinstalled workstation, follow the instructions in this section to set up your OS and software.

After the boot process completes, you can view additional HP Linux documentation by simply opening your Internet browser (the browser is automatically set to use the local HP documentation page as its default). You can also access Linux Web links for Red Hat (Internet access required) by using your Internet browser.

NOTE For additional information concerning the setup of Linux-preinstalled or Linux-enabled workstations, refer to the *HP User Manual for Linux*, located at http://www.hp.com/support/linux_user_manual.

For more information about HP and Linux, visit http://www.hp.com/linux.

Starting Up the Linux Operating System

The first time the workstation is booted, the Red Hat First Boot utility displays. This program enables you to enter your password, network, graphics, time, and keyboard settings for your workstation.

CAUTION When the automatic installation has begun, DO NOT TURN OFF THE WORKSTATION UNTIL THE PROCESS IS COMPLETE. Turning off the workstation during the installation process might damage the software that runs the workstation or prevent its proper installation.

NOTE When you enable the YPBind feature in the Network tab of the Linux Setup Tool, you might get a blank screen for about 15–30 seconds after you have selected and saved all of your settings and have exited the utility. This is normal. The boot process continues its execution after the screen returns.

Restoring the Linux Operating System

NOTE To restore the Linux OS, the HP Driver CD and Red Hat box set are required.

Download the latest HP Driver CD to get any new enhancements.

NOTE Linux does not support mixed hard disk drive types for manufacturing preload. When restoring the operating system, mixed hard disk drive types can be handled with the restoring media.

DOWNLOADING THE LATEST HP DRIVER CD

To download the latest HP Driver CD:

1 Download the ISO image to a local hard drive from the HP support Web site for the appropriate workstation platform (such as http://www.hp.com/support/xw4200).

   a Click the download drivers and software link.

   b Select the Linux OS that matches your box set.

   c Select the latest version from the Utility Tools section.

   d Download and unpack it (`tar zxvf filename.tgz`).

2 Copy the ISO image to CD-R bootable media. On another Linux workstation, use the cdrecord utility. Identify the device address for the CD burner (`cdrecord --scanbus`).
   The default is usually 2, 0, 0.

Example:
```
cdrecord -v -eject dev=2,0,0 CD0_golden.iso
```

INSTALLING WITH THE HP DRIVER CD

To install with the HP Driver CD:

1 Boot the workstation from the Red Hat box set Binary CD 1.

2 Insert the Linux operating system CDs from the Red Hat box set as prompted.

3 Continue following the prompts until the operating system is successfully installed.

4 Configure the X server to start on reboot.

5 Reboot the workstation.

6 Follow the prompts to set up your system with the Red Hat First Boot utility.

7 When prompted in First Boot to add additional CDs, insert the HP Driver CD into the CD-ROM tray of the workstation.

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8 Click **Install** next to "Additional CDs."
The HP Driver CD window opens.

9 Click **Press to begin install...**

10 When the install is done, you will have two options, "Reboot now..." on the left side and "Press to continue, reboot later..." on the right side. Click **Reboot now...**

Upgrading Device Drivers

If you must upgrade a Linux device driver, visit the HP Web site at http://www.hp.com/go/workstationsupport.

Linux-Enabled Workstations

Linux-enabled workstations are not pre-installed with Linux. They require the HP Installer Kit for Linux and the purchase of a Red Hat box set. The Installer kit includes the HP CDs necessary to complete the installation of all versions of the Red Hat box set which have been verified to work on HP workstation hardware.

Verifying Hardware Compatibility

To see which Linux versions have been verified to work on HP workstation hardware:

1 Go to http://www.hp.com/support/workstation_manuals.

2 Select your HP workstation model.

3 Click the **Hardware Support Matrix for Linux** link.

Installing the Linux Operating System

To install the Linux operating system on your Linux-enabled system:

1 Follow the instructions for "Restoring the Linux Operating System" in the previous section.

2 Follow the instructions for "Starting Up the Linux Operating System" in the previous section.

NOTE For more information concerning the setup of Linux-preinstalled or Linux-enabled workstations, refer to the *HP User Manual for Linux*, located at http://www.hp.com/support/linux_user_manual.

For more information about HP and Linux, visit http://www.hp.com/linux.

Upgrading Device Drivers

If you must upgrade a Linux device driver, visit the HP Web site at http://www.hp.com/go/workstationsupport.

HP Software

The following HP software will also be installed the first time the workstation is turned on:

- Computer Setup (F10) Utilities and diagnostic features

- HP Support Software including device drivers

- HP Client Manager Software (available for download from http://www.hp.com/go/EasyDeploy)

- System Software Manager (available for download from http://www.hp.com/go/ssm)

- Power Management Setup with energy saver features (not supported for Linux)

- Security Management tools

- Software Support Management tools

Certain drivers and utilities are available only in selected languages. You can obtain the latest version of these files, in English and selected other languages, in one of the following ways:

- Support Software CD

- HP Web site at http://www.hp.com

- *Restore Plus!* CD, which is supplied with Windows-based workstations

- *HP Workstations Driver for Red Hat Enterprise Linux 3* CD, which is supplied with Linux-based workstations

NOTE Additional HP software might be required in certain situations.

Restoring the Operating System

Restore the original Microsoft Windows XP Professional operating and factory-installed software by using the *Restore Plus!* CD and the OS CD that came with the workstation. Carefully read and follow the instructions provided with the *Restore Plus!* CD.

For more information about restoring the Linux OS or software, see "Restoring the Linux Operating System" on page 29.

Protecting the Software

To protect software from loss or damage, you should keep a backup copy of all system software, applications, and related files stored on the hard drive. Refer to the operating system or backup utility documentation for instructions on making backup copies of data files.

Ordering Backup Software

All software that shipped with the workstation, including the *Restore Plus!* CD, can be ordered from HP as a single set, or you can order the various software packages separately.

NOTE Before calling HP to order the software, be sure to have the serial number of the workstation available. This number is necessary for all diskette orders. See the "Serial Number and COA Label Location" on page 19 for the location of the serial number on the workstation.